

B. Amendments to the Claims

The following listing of the claims replaces all prior versions and listings of the claims in the application.

Claims 1-16 (Canceled)

17. (Currently Amended) A transistor formed on a substrate assembly, comprising:

- a raised drain structure;

- a raised source structure;

- a gate located between said source and said drain;

- a first capping layer in communication with at least a portion of said gate and said source;

- a first portion of a gate oxide region in communication with at least a portion of said gate and said source;

- a first pocket implant junction area located in said substrate assembly and comprising an excess amount of dopant extending partially beneath said gate and said source, wherein said first pocket implant junction area is characterized by a non-uniform dopant profile and extends under a first portion of said source and under a first portion of said gate ~~includes a first pocket implant junction and a first outdiffusion area, wherein said first pocket implant junction is counterdoped by a substrate dopant;~~

- a second capping layer in communication with at least a portion of said gate and said drain;

a second portion of said gate oxide region in communication with at least a portion of said gate and said drain; and

a second pocket implant junction area located in said substrate assembly and comprising an excess amount of dopant ~~extending partially beneath said gate and said drain~~, wherein said second pocket implant junction area is characterized by a non-uniform dopant profile and extends under a first portion of said drain and under a second portion of said gate ~~includes a second pocket implant junction and a second outdiffusion area, wherein said second pocket implant junction is counterdoped by said substrate dopant.~~

Claims 18-97 (Canceled)

98. (Previously Presented) The transistor of claim 17, wherein said raised source includes doped polysilicon.

99. (Previously Presented) The transistor of claim 17, wherein said raised drain includes doped polysilicon.

100. (Previously Presented) The transistor of claim 17, wherein said gate includes doped polysilicon.

101. (Previously Presented) The transistor of claim 17, wherein said source includes a plug.

102. (Previously Presented) The transistor of claim 101, wherein said plug includes an adhesive layer.

103. (Previously Presented) The transistor of claim 17, wherein said gate includes a gate terminal.

Claims 104-124 (Canceled)

125. (Currently Amended) A transistor formed on a substrate assembly, comprising:

- a raised drain structure;

- a raised source structure;

- a gate located between said source and said drain;

- a first capping layer in communication with at least a portion of said gate and said source;

- a first portion of a gate oxide region in communication with at least a portion of said gate and said source;

- a first pocket implant junction area located in said substrate assembly and comprising an excess amount of dopant extending partially beneath said gate and said source, wherein said first pocket implant junction area is characterized by a non-uniform dopant profile and extends under a first portion of said source and under a first portion of said gate ~~includes a first outdiffusion area and a first pocket implant junction comprising a first doped silicon area, wherein said first doped silicon area is counterdoped by a substrate dopant;~~

a first outdiffusion area located in said substrate assembly and extending under a second portion of said source;

a second capping layer in communication with at least a portion of said gate and said drain;

a second portion of said gate oxide region in communication with at least a portion of said gate and said drain; and

a second pocket implant junction area located in said substrate assembly and comprising an excess amount of dopant extending partially beneath said gate and said drain, wherein said second pocket implant junction area is characterized by a non-uniform dopant profile and extends under a first portion of said drain and under a first portion of said gate ~~includes a second outdiffusion area and a second pocket implant junction comprising a second doped silicon area, wherein said second doped silicon area is counterdoped by said substrate dopant; and~~

a second outdiffusion area located in said substrate assembly and extending under a second portion of said drain.

126. (Currently Amended) The transistor of claim 125, wherein said first and second pocket implant junctions ~~doped silicon areas~~ include phosphorous.

Claim 127 (Canceled)

128. (Currently Amended) A transistor formed on a substrate assembly, comprising:

a raised drain structure;

a raised source structure;

a gate located between said source and said drain;

a first capping layer in communication with at least a portion of said gate and said source;

a first portion of a gate oxide region in communication with at least a portion of said gate and said source;

~~a first implant junction area located in said substrate assembly extending partially beneath said gate and said source, wherein said first junction area includes a first pocket implant junction and a first outdiffusion area, wherein said first pocket implant junction is counterdoped by a substrate dopant;~~

a second capping layer in communication with at least a portion of said gate and said drain;

a second portion of said gate oxide region in communication with at least a portion of said gate and said drain; and

~~a second implant junction area located in said substrate assembly extending partially beneath said gate and said drain, wherein said second junction area includes a second pocket implant junction and a second outdiffusion area, wherein said second pocket implant junction is counterdoped by said substrate dopant~~

a halo implant structure located in said substrate assembly and comprising a first pocket implant junction and a second pocket implant junction, wherein said first pocket implant junction includes an excess amount of dopant and extends under a first edge of the gate, wherein said second pocket implant

junction includes an excess amount of dopant and extends under a second edge of the gate, and wherein the first and second implant junctions are each characterized by a non-uniform dopant profile.